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# Adjusting to Social Change: A multi-level analysis in three cultures

Professor Robin B. Goodwin

Brunel University
Department of Psychology, Social Sciences
Kingston Lane
Uxbridge, United Kingdom UB8 3PH

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### 13. SUPPLEMENTARY NOTES

### 14. ABSTRACT

Psychologists have long been interested in examining response to stressful life transitions, but little attention has been paid to the longer-term implications of major life transitions, or group and cultural differences in coping with such change. One major challenge faced by many societies is the impact of large-scale internal population movement. In the project reported here, we have brought together experts in social change, relationships and culture, and multi-level modeling to examine responses to large, potentially destabilizing migrations in China, Georgia and the US. The research has involved the analysis of two sets of archival data a) a multi-level questionnaire study conducted in all 3 countries addressing migrant experiences of internal migration (N=450) and b) 36 qualitative interviews conducted with local stakeholders and community leaders into the local impact of this migration. Multi-level analyses consider individual, group and cultural variations in migrant experience; thematic analyses local responses to this population movement. Findings address significant unresolved scientific issues concerning responses to major societal challenges across societal sub-groups and cultures. They have applied value to military forces whose presence is often associated with the large-scale movement of civilian populations, and who need to better understand the resettlement and integration of migrant groups into local communities.

A follow-on effort has been awarded as Grant 12-2117, Contract Number FA8655-12-1-2117, and is funded through May 2013.

### 15. SUBJECT TERMS

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# FINAL REPORT **EOARD Contract (FA8655-10-1-3002)**

#### **Abstract**

Psychologists have long been interested in examining response to stressful life transitions, but little attention has been paid to the longer-term implications of major life transitions, or group and cultural differences in coping with such change. One major challenge faced by many societies is the impact of largescale internal population movement (Reuveny, 2008). This project brings together experts in social change, relationships and culture, and multi-level modeling to examine responses to large, potentially destabilising migrations in China, Georgia and the US. Work involves analysis of two sets of archival data a) a multi-level questionnaire study conducted in all 3 countries addressing migrant experiences of internal migration (N=450) and b) 36 qualitative interviews conducted with local stakeholders and community leaders into the local impact of this migration. Multi-level analyses consider individual, group and cultural variations in migrant experience; thematic analyses local responses to this population movement. Findings address significant unresolved scientific issues concerning responses to major societal challenges across societal sub-groups and cultures. They have applied value to military forces whose presence is often associated with the large-scale movement of civilian populations, and who need to better understand the resettlement and integration of migrant groups into local communities.

### 1. Introduction

The general focus of the original research funded was on responses to different societal challenges in three cultures: China (internal migration), Georgia (the Russia-Georgian conflict) and the US (Hurricane Ike). A follow-on effort has been awarded to continue our research. While the general focus, responses to major societal challenges, will remain the same, the specific research will examine one common societal challenge to all three cultures (the impact of large-scale internal migration), and its implications for community activities, democratic participation and interpersonal trust. Focus is now on both the psychological impact of migration for the migrant, as well as for the community into which s/he is moving.

We are requesting this follow-on grant as a direct result of two significant challenges: a 12-month delay in Human Subjects Use clearing the IRB process, and mutual concerns by AFOSR, EOARD, and PIs regarding the impact of the delay on research outcomes involving multiple scenarios experienced by the populations (Hurricane Ike and the most recent major Georgia-Russia conflict both occurred in 2008). The effort will increase the efficacy of the research and resulting publication potential by considering cross-cultural variations in one common research theme to be collected

across countries. Previous work has typically looked at short-term stress responses to societal changes, rather than the longer-term implications of events for wider social beliefs, or the consequences of such beliefs for other behaviours (e.g. community trust). Furthermore, analysis has been primarily at the individual level of analysis. By incorporating recent developments in the appraisal of change (Kim, 2008) and the theory of social axioms (Leung, in press) our work will provide new understandings of the manner in which societal sub-group (e.g. social classes) and culture interact in the appraisal of internal migration, and the implications of this appraisal for specific behavioral and attitudinal responses (e.g. community engagement and civic trust). Combining this questionnaire data with in-depth qualitative interviews provides us with unique opportunities to match migrant appraisals with community responses to migration in these three cultural settings, allowing for a more integrated analysis of the impact of internal migration across groups and cultural settings.

## 2. Modifications in research questions.

- a. The new focus of the research will examine the *impact of 'destabilising migration*': the process by which large-scale migration within a nation can impact on the stability of a region (or indeed a whole nation). Such a migration can be the result of economic migration but also frequently follows internal conflict and external invasion. This moves our focus away from different societal challenges in different countries to a common and unified theme across the three nations, permitting a more coherent multilevel analysis across cultural settings. This will lead to the development of new multi-level models that examine individual, community and cultural effects and cross-level interactions.
- b. We will examine this migration process in China, Georgia and the US. In China we continue to focus on internal migrants from villages to cities. In Georgia we focus on Georgian migrants from conflicts who move to Tbilisi. In the US we examine internal migration within the country into Texas; US statistics show that this is the State into which there has been the most internal migration in the US. While there are still differences in these population movements across the countries we believe that there is still sufficient similarity to allow for a valid investigation that will address individual, sub-group (e.g. social class) and cultural variations in the appraisal of these moves and their implications for civic engagement and trust.
- c. In addition, one of the most interesting research questions to emerge is the potential parallel between an individual or sub-group's evaluation of large scale migration and the perception of this held by the wider community. Internal migration can pose a number of challenges to established communities, and community officers may evaluate the impact of internal migration on their community in a variety of ways. Understanding the challenges faced by an established community is therefore likely to have significant applied value to outside forces, who may be centrally involved in the relocation of populations.
- d. Research hypotheses: In our quantitative analyses we hypothesise that Level 1 (individual) indicators (individual values, perceived and received support resources, and long-term expectations about migration influence

migration appraisals) influence migration appraisals. This itself has implications for life satisfaction, social beliefs, and "social capital" involvement (community activities; democratic participation, interpersonal trust). However we hypothesize significant Level 2 (sub-group) and Level 3 (cultural) differences in these processes, with appraisal influenced by culture, social economic status of the community, community size, shared community networks and ethnic homogeneity.

# 3. Changes in methodology

- a. We will collect data using a modified version of the questionnaire proposed in the original EAORD questionnaire, Modifications involved the deletion of questions about locally specific events (e.g. Hurricane Ike) and the inclusion of one common theme; internal migration. Questions are reworded as appropriate to address this. Because these modifications are relatively small, around 90% of this questionnaire translation work has already been conducted
- b. Additional one-to-one in-depth expert interviews with key community figures and stakeholders from the 'majority' community in the area of migration in each country (for example, the city mayor, a housing officer, an education advisor). Taken with the quantitative survey data this qualitative data would provide an understanding of the evaluations of such movements from both the perspective of those who move and the local receiving communities. This additional in-depth data allows for the potential emergence of new migration topics not covered in our structured questions This combination of methods also opens the door for future research projects into this area while the complementarity of methods enhances our opportunities for publication from this work in high-level journals which encourage such combined methodologies (e.g. Social Science and Medicine).
- c. Sample sizes will be 150 per country, with the process of achieving representative samples following the processes outlined in the original application.
- d. The collection of the quantitative survey data is conducted under EAORD auspices but is funded by local university funding. As such this will require only local ethical approval, which has already been accomplished. The qualitative interview data would be also collected outside of EAORD funding so does not require US IRB approval. We will gain written permission for the use of this archival data for analysis from the relevant data holders in each institution.
- e. The archival data, including the interviews conducted, will be analysed using the resources already allocated to this project. It is important to note that qualitative in-depth data analysis can be very time consuming and is likely to involve intensive translation and analytic work.

### 4. Implications for funding allocations

The revised research no longer requires the funding allocated for data collection but will necessitate an increased emphasis on high-level translation and analysis of the rich qualitative data, as well as additional work to integrate findings from this within the quantitative data set. We therefore propose to reallocate the resources set aside for

the survey data collection submitted in our original proposal to the required interview translations and qualitative data analysis.. The remaining budget will remain unchanged.

5. Changes to key components of the research project are summarized in the table below.

Key activities	Original proposal	Modified proposal
Broad research question	The impact of large scale societal challenges on individuals within a society	Not Changed
Specific research question	The evaluation of internal migration (China), the aftermath of a hurricane (US) and the Russian-Georgian conflict (Georgia)	The evaluation of large- scale rapid internal migration (all three countries)
Research hypotheses	Specific individual and sub group-level variables influence evaluation of societal changes	Specific individual, sub group-level and cultural variables influence evaluation of rapid migration. – Please see 2d above for more detail on hypotheses
Data to be collected	Questionnaires on responses to Hurricane Ike (US sample), the Georgian-Russian conflict (Georgia) and internal migration (China)	Modified questionnaire (see 3a above)
Methods: Respondents	Residents from the major cities and small towns in the 3 countries	Internal Migrants moving to the 3 major cities and smaller towns <i>and</i> expert informants from the nonmigrating community
Organisations/ peoples involved	Brunel University (coordinating), Tbilisi University (Georgia), San Jose State University (US), Fudan University (China)	Brunel University (coordinating), Tbilisi University (Georgia), San Jose State University (US), Fudan University (China) plus significant stakeholders and community leaders in each country
Scenarios	Questionnaire dealing with different societal challenges	Unified questionnaire dealing with migration plus in-depth semi-

Data analyses	Multi-level analysis of questionnaire data	structured interviews examining community leader responses Multi-level analysis of archival questionnaire data plus thematic analysis of in-depth interviews
Potential Publication outlets	Major applied and theoretical journals in psychology	Major applied and theoretical journals in psychology (potential outputs: Journal of Applied Psychology; Personality and Social Psychology Bulletin; Journal of Cross-Cultural Psychology) plus more sociological journals interested in qualitative or mixed methods outputs (Social Science and Medicine; BMC Public Health; )
Schedule	Data collection and analysis over two year period	Analysis of both quantitative and qualitative data during the second year of the project
Costings	See original proposal	See modified proposal: Overall total allocation of costs as before

## 6. Accomplishments thus far

- IRB process successfully completed and approved in participating countries (approval from 5 IRB boards: San Jose State University (US); Fudan University (China); Georgian Academy of Sciences (Tbilisi); Social Sciences internal panel (Brunel, UK) Brunel university ethics board (Brunel, UK)
- Questionnaire translation into Chinese and Georgian.
- Project team planning meeting held, Shanghai, March 2011. One sessions was also attended by Prof Iago Kachkachishvili, Professor of Sociology at Tbilisi State University, who is advising on us data collection in Georgia (his attendance was funded by other sources).
- Further project planning meeting (to be held June 25-30<sup>th</sup> 2011, Shanghai, Goodwin, Sun (China), Zhang (US)).
- This work has been discussed in the following invited presentations:

   a) "Levels of analysis in psychological research" Victoria University,
   Wellington, New Zealand, May 2011 (Goodwin)
   b) Keynote address by the PI (July 11<sup>th</sup> 2011, Kyoto University, Japan).
   Modelling the psychological impacts of major societal changes and challenges: A new, integrative model". (Goodwin)

- c) University research presentation: "Modelling social change". Brunel University, March 2010. (Goodwin)
- d) Public opinion research and China. Public workshop. Fudan University, April (Sun).